BRUHAT BANGALORE MAHANAGARA PALIKE

YELHANKA ZONE ELECTRICAL DIVISION

Name of Work:-Detailed Estimate for upgradation and Improvements to hebbala Electrical Crematorium Furnace - B in Ward no. 7 Yelahanka Zone.

Budget Head .....

Division No..... Estimate No. ..... For Rs. **39,00,000.00**

	Sl.No.	Description of Work	Qty.	Rate Rs.	Unit	Amount
		A. Upgradation of Furnace From Horizontal Heating coils to Vertical system				
1	AR	Supplaying & Fixing of Coil holding bricks Vertical System 115X115X300 mm	90	2200.00	Nos	198000.00
2	AR	Supplaying & Fixing of Insulation bricks std 75X115X225mm	2500	84.00	Nos	210000.00
3	AR	Supplaying & Fixing of Refractor STD IS 6 75X115X225mm	1250	86.00	Nos	107500.00
4	AR	Supplaying & Fixing of Refractor STD IS 8 75X115X225mm	1250	102.00	Nos	127500.00
5	AR	Supplaying & Fixing of Refractor side arch bricks 230X115X75/65mm	200	104.00	Nos	20800.00
6	AR	Supplaying & Fixing of Refractoy slabs MCL 150X300X600mm	29	6200.00	Nos	179800.00
7	AR	Supplaying & Fixing of Refractoy slabs MCL 150X300X450mm	26	5600.00	Nos	145600.00
8	AR	Supplaying & Fixing of Body laying with MCL 150X300X600mm	8	11600.00	Nos	92800.00
9	AR	Supplaying & Fixing of Refractor cement Fine ACC 50(50 kg bag)	15	3200.00	Bags	48000.00
10	AR	Supplaying & Fixing of Refractor cement FIR crate super (50 kg bag)	14	5200.00	Bags	72800.00
11	AR	Supplaying & Fixing of Refractoy cement white heat K Acc make	2	6200.00	Bags	12400.00
12	AR	Supplaying & Fixing of Acoustic set liquid bind	1	6800.00	drum	6800.00
13	AR	Supplaying & Fixing of FIBT blank kit 96 grade	13	4600.00	Box	59800.00
14	AR	Supplaying & Fixing of FIBT blank kit 128 grade	2	6200.00	Box	12400.00
15	AR	Supplaying & Fixing of SS Stud 304X250X10m	50	280.00	Nos	14000.00
16	AR	Supplaying & Fixing of FIR clay cement	12	1200.00	Bags	14400.00
17	AR	Supplaying & Fixing of Refractoy slabs IS8 100X300X600mm	8	3800.00	Nos	30400.00
18	AR	Supplaying & Fixing of Refractoy slabs IS8 100X300X450mm	18	2800.00	Nos	50400.00

19	AR	Supplaying & Fixing of 3.5 KW Heating coils Made out of 5.8mm Thick 80/20 Grade nickel chromium wire, Heating Zone should be 950mm length, End terminal rod ss 304Grade 10mm dia 550mm Lenth suitable for Verticle mounting system in Electrical Furnace including Porcelin beeds spacers Supporting system Complet	18	37000.00	Nos	666000.00
20	AR	Labour charges for Removing and relining works	1	80000.00	job	80000.00
21	AR	Supplaying & Fixing of 25X4 mm coper flat For Coil connecting	40	1500.00	kgs	60000.00
22	AR	Supplaying & Fixing of Epoxy insulators (bus bar mounting)	30	80.00	Nos	2400.00
23	AR	1) Furnace top fabrication works with MS angle and channel with covering sheets	1	120000.00	job	120000.00
24	AR	2) Furnace main door work front sheet repalcement 5 mm thickness, guiding wheel (4 Nos) with shaft including bearing repalcement and mechanism servicing	1	66000.00	Set	66000.00
25	AR	2) Furnace back doorAsh removing doors Newly fabricated.	1	70000.00		70000.00
26	AR	3) Body charging trolley servicing and repair works	1	20000.00	job	20000.00
27	AR	fabrication, Supplay ,erection & commissioning of Exhaust Blower. Following specifications, 7.5 Hp,1440 RpM 3Phase Induction Motor (ABB make) Centrifugal belt driven 50mm SS310 Shaft heavy duty 2Nos ball bearing, Motor & Blower Mounting frame 75x50 mm C Chanel, Implers & Outer body 310SS 5 mm Thick With Matching Flanges Air in let & out let Opening300mm,	1	472312.00	Set	472312.00
28	AR	Supplay & Erection of 1/2 Hp 3Phase 50 cycles 1440 RPM Flange Mounting Motor with Gear Out put 10 RPM	1	49500.00	Set	49500.00
	AR	**B. Improvements to Scrubber System**				0.00
29	AR	**Scrubber work**- SS fabricated 304 sheet 3x3x3 feet 3mm thickness, water tank, using 40x40x5 mm iron L angle -30 mtrs SS flat:40x5 : 25 mtrs ; SS pipe 2: 6 mtrs; Gate valve 2,4 Nos; Elbow 2" 8 Nos; 2" flange: 8 Nos; ¾" pipe: 12mtrs; ¾" flange: 8 Nos; ¾" Bend : 8 Nos Reducer ¾" 4 Nos Water pump 3 phase 1 HP 1 ½" x 1 ½": 2 Nos. (Momoblock pump), including of labour, diamantling erection and commission of all the above work.	1	195000.00	Set	195000.00
30	AR	SS Fabrication 2 mm thick, 500 mm dia with flange. (blower to Chimney connecting pipe)	5	29500.00	Rmtrs	147500.00
31	AR	SS Fabrication 2 mm thick, 250 mm dia with flange. (blower to Chimney exhausting pipe)	3	15600.00	Rmtrs	46800.00
32	AR	SS fabrication 2 mm thick, 300 mm dia with flange. (by-pass lining work)	6	21250.00	Rmtrs	127500.00

		C. Improvements to Furnes Panel board .				0.00
33	47/6.16.2	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.40-63 Amps SP	7	677.00	Nos	4739.00
34	6.16.6	40-63Amps TPN	2	1936.00	Nos	3872.00
35	48/6.36	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C. 50 Hz 12/24v D.C.	3	442.00	Nos	1326.00
36	48/6.27	Supplying, fixing and wiring 3 Phase Digital Ammeter /Voltmeter.	6	1224.00	Nos	7344.00
37	48/6.34	Supplying, fixing and wiring 1000/5A to 1600/5A 15VA Burden class 1 Current Transformer.	3	720.00	Nos	2160.00
38	48/6.25	Supplying, fixing and wiring rotary selector switch suitable for Ammeter.	2	172.00	Nos	344.00
39	48/6.26	Supplying, fixing and wiring rotary selector switch suitable for Voltmeter.	2	140.00	Nos	280.00
40	45/6.9.1	Supplying and fixing HRC fuse units base on existing switch/panel board.up to 32Amps	9	174.00	Nos	1566.00
41	6/2.5.2	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP - A 1.5 sqmm	300	18.60	Mtrs	5580.00
42	2.5.3	2.5 sqmm	300	29.20	Mtrs	8760.00
43	2.5.6	16 sqmm	72	171.00	Mtrs	12312.00
		Total Rs				**3574695.00**
		Add 9.1% KRIDL Charges				325297.25
		Mislenious				7.75
		Grand Total Rs				**3900000.00**

Certificate

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD (Elec) SR of 2014-15 & Approved rates .

T.K.N. Bandy
jr/Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
yelhanka zone
Bruhat Bangalore Mahanagara Palike

Administrative Sanction for Rs. 39.00 lakhs
Thirty Nine Lakh only
is accorded under P0486 M.and R to
Burial Grounds and Burning ghat
Electrical Crematorium
Registered as EE No. EE/ELE/BBMP/AS/2016-17 Subject
to conditions contained in enclosed memo
No. P.No. 56 and 57 Dt: 06.05.17

EXECUTIVE ENGINEER (ELEC)
YELHANKA ZONE
BRUHAT BANGALORE MAHANAGARA PALIKE

Executive Engineer

Technical Sanction
Accorded For 39.00 Lakhs R.
Head of A/C P0486
CER NO : 30 Dt: 08/05/17

TA CE (YNK)